



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,881	03/07/2007	Frank Scott	ALU 800974/LUC-B14	5960
47382	7590	06/30/2010		
Carmen Patti Law Group, LLC One N. LaSalle Street 44th Floor Chicago, IL 60602			EXAMINER LEBASSI, AMANUEL	
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			06/30/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,881	<b>Applicant(s)</b> SCOTT ET AL.	
	<b>Examiner</b> AMANUEL LEBASSI	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-23 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-23 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 04/07/2010 have been fully considered but they are not persuasive.

2. The applicant argued features in the claims, i.e. A method of controlling communications service in a telecommunications system comprising first and second subsystems each including a radio access network comprising base stations and at least a radio network controller connected to at least some of said base stations and to a core network switch the first subsystem being adapted to support first and second communications services and the second subsystem being adapted to support the second communications service, the method comprising the following steps in the case of a first mobile terminal having a call in progress with a second terminal under the first communications service via at least a base station of the radio access network of the first subsystem: the radio network controller of the first subsystem detecting a call transfer condition for transferring the call to a base station of the radio access network of the second subsystem; informing the core network switch to which the radio network controller of the first subsystem is connected of said detection of a call transfer condition; and if the second subsystem is not adapted to process the call under the first communications service, requesting a change of service in order for said call to continue under the second communications service reads upon Choi in view of Soderbacka as follows.

Art Unit: 2617

Choi discusses where a controller provides overall control to the DBDM terminal, and controls power supply for signal processing according to a selected communication scheme between WCDMA and CDMA and a method for implementing handoffs between heterogeneous networks. Therefore, Choi is showing the limitation of **“A method of controlling communications service in a telecommunications system”**.

Choi discusses subsystems with subsequent BTS's, nodes, BSC's and RNC.

Therefore, Choi is showing the limitation of **“first and second subsystems each including a radio access network comprising base stations and at least a radio network controller connected to at least some of said base stations and to a core network switch”**. Choi discusses WCDMA 3G where the 3G supports voice, data and video and CDMA 2G where the 2G supports voice . Therefore, Choi is showing the limitation of **“the first subsystem being adapted to support first and second communications services and the second subsystem being adapted to support the second communications service ”**. Choi discusses where the user equipment or mobile station enters the area of CDMA from the WCDMA network after having a call in progress under WCDMA. Therefore, Choi is showing the limitation of **“in the ease of a first mobile terminal having a call in progress with a second terminal under the first communications service via at least a base station of the radio access network of the first subsystem”**. Choi discusses where a handoff i.e. a call transfer condition for transferring the call to a base station. Therefore, Choi is showing the limitation of **“the radio network controller of the first subsystem detecting a call transfer condition for transferring the call to a base station of the radio access**

Art Unit: 2617

**network of the second subsystem".** Choi discusses where the mobile station notify the WCDMA network of its ESN. Therefore, Choi is showing the limitation of **"informing the core network switch to which the radio network controller of the first subsystem is connected of said detection of a call transfer condition".** Choi discusses where a request for change is made because the CDMA network is unable to process the call under WCDMA and where if the WCDMA signal strength is weak, the controller transitions to the second state i.e. the controller requests from the CDMA network. Therefore, Choi is showing the limitation of **"if the second subsystem is not adapted to process the call under the first communications, requesting a change in order for said call to continue under the second communications".**

Soderbacka discusses where the mobile has to handoff from 3g WCDMA type to a 2g GSM (voice or audio) type. Therefore, Soderbacka is showing the limitation of **"change of service".**

Regarding the applicants arguments on dependent claims limitations, those limitation where shown by Choi in view of Soderbacka and in further view of Bruno where Bruno shows wherein the coding associated with the first communications service is compatible with the H.324 standard.

Regarding the applicant's arguments on Choi teaching controlling communications service in a system comprising first and second subsystems with the first subsystem being adapted to support first and second communication services while the second subsystem is adapted to support the second communication service, Choi is discussing where a controller provides overall control to the DBDM terminal, and

Art Unit: 2617

controls power supply for signal processing according to a selected communication scheme between WCDMA and CDMA and a method for implementing handoffs between heterogeneous networks.

Regarding the applicants arguments on combination of references, all references were analogous and performing similar tasks and therefore are combinable.

Regarding the applicants argument on motivation, the motivation to combine was shown in the background of the secondary reference.

Therefore the argued features where read upon the cited references or are written broad enough that they read upon the cited references as follows/

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-5, 8-9, 11-19, and 22-23, 25-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. US 7096020 in view of Soderbacka et al. US 20030114158.

Regarding claim 1, Choi discloses a method of controlling communications in a telecommunications system (**col. 1, lines 19-22 - system and method for implementing handoffs between heterogeneous networks**). Choi discloses first and second subsystems each including a radio access network comprising base stations and at least a

Art Unit: 2617

radio network controller connected to at least some of said base stations and to a core network switch (**Col. 1, lines 34-42 and Fig. 1, BTS and Node B, BSC and RNC, MSC and UMSC**), the first subsystem being adapted to support first and second communications (**WCDMA (3G) and CDMA(2G) – Fig 1**) and the second subsystem being adapted to support the second communications (**CDMA, (2G) – Fig. 1**). Choi discloses the method comprising the following steps in the case of a first mobile terminal having a call in progress with a second terminal under the first communications via at least a base station of the radio access network of the first subsystem (**col. 1, lines 54-64, where the user equipment or mobile station enters the area of CDMA from the WCDMA network**): the radio network controller of the first subsystem detecting a call transfer condition for transferring the call to a base station of the radio access network of the second subsystem (**col. 1, lines 61-67 where a handoff i.e. a call transfer condition for transferring the call to a base station**). Choi discloses informing the core network switch to which the radio network controller of the first subsystem is connected of said detection of a call transfer condition (**col. 2, lines 8-14 where the mobile station notify the WCDMA network of its ESN**) and • if the second subsystem is not adapted to process the call under the first communications, requesting a change of in order for said call to continue under the second communications (**col. 2, lines 12-35 where a request for change is made because the CDMA network is unable to process the call under WCDMA and col. 4. lines 60 – col. 5, line 3 where if the WCDMA signal strength is weak, the controller transitions to the second state i.e. the controller requests from the CDMA network**).

**Choi is silent on change of services. However, Soderbacka teaches change of services (paragraph [0012] where the mobile has to handoff from 3g WCDMA type to a 2g GSM (voice or audio) type).**

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the invention of Choi and add change of services. The motivation would be in order to guarantee a continued and satisfactory supply (**paragraph [0005]**).

Regarding claim 2, Choi modified by Soderbacka discloses wherein the radio network controller of the first subsystem is connected to a core network switch and the radio network controller of the second subsystem is connected to a second core network switch, wherein, after the first switch has been informed of said detection of a call transfer condition, a request to transfer the call from the first switch to the second switch is transmitted (**col. 2, lines 14-19, where radio resource information to be transmitted between MAPs (Mobile Application Parts) in heterogeneous networks: the UMSC (first switch) transmits information to the MSC (second switch)**), and wherein the inability of the second subsystem to process the call under the first communications is indicated to the first switch by a transfer failure message sent in response to said transmission of the call transfer request (**col. 2, lines 36-38 where handoff is impossible under current situations**).



Regarding claim 3, Choi discloses wherein the first subsystem is of the third generation and the second subsystem is of the second generation (**col. 1, lines 34-42 and Fig. 1, where the first subsystem is 3G and the second subsystem is 2G**).

Regarding claim 4, Choi modified by Soderbacka discloses wherein the first communications service necessitates a higher transmission bit rate than the second communications service (**col. 4, lines 20-28**).

Regarding claim 5, Choi modified by Soderbacka discloses wherein each communications service is associated with coding over at least a segment of the call and the service change request includes a request to change the coding over said call segment (see above).

Regarding claim 8, Soderbacka teaches wherein the second communications service is a voice telephone service (**paragraph [0002] where second communications service is a GSM voice service**).

Regarding claim 9, Choi discloses wherein Adaptive Multi rate (AMR) coding is associated with the second communications (**col. 4, lines 20-22- where the WCDMA processing unit includes AMR**).

Regarding claim 11, the combination of above discloses wherein, if the second communications service necessitates a bit rate over a radio segment that is strictly lower than a maximum bit rate value authorized by the second subsystem, the surplus bit rate is used to transmit data via at least said base station of the radio access network of the second subsystem (see above).

Regarding claim 12, Choi modified by Soderbacka discloses wherein the service change request is transmitted to the first mobile terminal and to the second **terminal (col. 2, lines 49-55).**

Regarding claim 13, Choi modified by Soderbacka discloses wherein the service change request is transmitted to the second terminal via at least a switch, a radio network controller and a base station to which the second terminal is connected (**col. 2, lines 14-38).**

Regarding claim 14, Choi discloses wherein the service change request includes a request for modification of radio access bearer characteristics of the call respectively at the mobile first terminal end and at the second terminal end (**col. 6, line 28-36 and Fig. 6).**

Regarding claim 15, Choi discloses a core network switch of a telecommunications system (**col. 1, lines 19-22 - system and method for implementing**

**handoffs between heterogeneous networks).** Choi discloses first and second subsystems each including a radio access network comprising base stations and at least a radio network controller connected to at least some of said base stations, at least some of the radio network controllers also being connected to said core network switch, the first subsystem being adapted to support first and second communications and the second subsystem being adapted to support the second communications (**Col. 1, lines 34-42 and Fig. 1, BTS and Node B, BSC and RNC, MSC and UMSC**), said core network switch comprising, in relation to a first mobile terminal having a call in progress with a second terminal under the first communications via a base station of the radio access network of the first subsystem (**col. 1, lines 54-64, where the user equipment or mobile station enters the area of CDMA from the WCDMA network**). Choi discloses • means for receiving an indication that the radio network controller of the first subsystem has detected a call transfer condition for transferring the call to a base station of the radio access network of the second subsystem (**col. 1, lines 61-67 where a handoff i.e. a call transfer condition for transferring the call to a base station**) and means for requesting a change in order for said call to continue under the second communications if the second subsystem is not adapted to process the call under the first communications (**col. 2, lines 12-35 where a request for change of is made because the CDMA network is unable to process the call under WCDMA and col. 4. lines 60 – col. 5, line 3 where if the WCDMA signal strength is weak, the controller transitions to the second state i.e. the controller requests from the CDMA network**).

**Choi is silent on change of services. However, Soderbacka teaches change of services (paragraph [0012] where the mobile has to handoff from 3g WCDMA type to a 2g GSM (voice or audio) type).**

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the invention of Choi and add change of services. The motivation would be in order to guarantee a continued and satisfactory supply (paragraph [0005]).

Regarding claim 16, Choi discloses wherein the radio network controller of the first subsystem is connected to said core network switch and the radio network controller of the second subsystem is connected to a second core network switch, the switch further comprising means responding to reception of an indication that a call transfer condition has been detected by transmitting a call transfer request to the second switch (**col. 2, lines 14-19, where radio resource information to be transmitted between MAPs (Mobile Application Parts) in heterogeneous networks: the UMSC (first switch) transmits information to the MSC (second switch))** and means for deducing that the second subsystem is not able to process the call under the first communications from the reception of a transfer failure message in response to transmission (**col. 2, lines 36-38 where handoff is impossible under current situations).**

Regarding claim 17, Choi discloses wherein the first subsystem is of the third generation and the second subsystem is of the second generation (**col. 1, lines 34-42 and Fig. 1, where the first subsystem is 3G and the second subsystem is 2G).**

Regarding claim 18, Choi modified by Soderbacka discloses wherein the first communications service necessitates a higher transmission bit rate than the second communications service (**col. 4, lines 20-28**).

Regarding claim 19, Choi modified by Soderbacka discloses wherein each communications service is associated with coding over at least a segment of the call and the means for requesting a service change comprise means for requesting a coding change over said segment of the call. (See above)

Regarding claim 22, Choi modified by Soderbacka **discloses** the second communications service is a voice telephone service (**col. 1, lines 54-57 wherein the second communications service is a 2G CDMA voice telephone service**).

Regarding claim 23, Choi discloses wherein Adaptive Multi Rate (AMR) coding is associated with the second communications (**col. 4, lines 20-22- where the WCDMA processing unit includes AMR**).

Regarding claim 25, Choi modified by Soderbacka **discloses** wherein the means for requesting a service change comprise means for transmitting a service change request to change from the first communications service to the second communications service to the mobile first terminal and to the second terminal (**col. 2, lines 49-55**).

Regarding claim 26, Choi discloses wherein the means for transmitting a change request to the second terminal are provided by at least a switch, a radio network controller and a base station to which the second terminal is connected (**col. 2, lines 14-38**).

Regarding claim 27, Choi discloses wherein the means for requesting a service change include means for requesting a modification of characteristics of at least a radio access bearer of the call (**col. 6, line 28-36 and Fig. 6**).

Regarding claim 28, Soderbacka teaches wherein said transfer failure message is sent to the first core network switch and is forwarded to the radio network controller of the first subsystem and the step of informing the first switch of detection by the radio network controller of the first subsystem of a call transfer condition for transferring the call to a base station of the radio access network of the second subsystem is repeated for as long as a transfer failure message is forwarded to the radio network controller of the first subsystem (**paragraph [0063] and [0110]**).

Regarding claim 29, Choi discloses means for forwarding said transfer failure message to the radio network controller of the first subsystem (**paragraph [0110]**).

Art Unit: 2617

3. Claims 6, 7, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. US 7096020 in view of Soderbacka et al. US 20030114158 and in further view of Bruno et al. US 6262978.

Regarding claim 6, Choi modified by Soderbacka **fails** to disclose wherein the coding associated with the first communications service is compatible with the H.324 standard. However, Bruno teaches wherein the coding associated with the first communications service is compatible with the H.324 standard (**col. 2, line 44-50**).

At the time of invention, it would have been obvious to modify the invention of Choi with teaching of Bruno. The motivation would be in order to provide video capability over a phone line (**col. 1, lines 37- 41**).

Regarding claim 7, Bruno discloses wherein the first communications service is a video telephone service (**col. 3, line 34-43**).

Regarding claim 20, Bruno discloses, wherein the coding associated with the first communications service is compatible with the H.324 standard (**col. 2, line 44-50**).

Regarding claim 21, Bruno discloses wherein the first communications service is a video telephone service (**col. 3, line 34-43**).

*Conclusion*

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

2. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Amanuel Lebassi, whose telephone number is (571) 270-5303. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached at (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished



Art Unit: 2617

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Amanuel Lebassi*

/A. L./

6/26/2010

/NICK CORSARO/

Supervisory Patent Examiner, Art Unit 2617